

# APPROVAL SHEET

**Dipole ANTENNA**  
**802.11 b/a Series**  
**2.4/5.x GHz Dual Band Working Frequency**  
**Halogens Free Product**  
**P/N: RFDPA171300SBLB820**

Customer : \_\_\_\_\_  
Customer 's Part No. : \_\_\_\_\_  
Approval No. : \_\_\_\_\_  
Issue Date : \_\_\_\_\_

\*Contents in this sheet are subject to change without prior notice.

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Wuxi City, 214105 JiangSu Province, China

Version	Date	Description	Author
V01	2017 Dec.	New Release	PIPI
V02	2021 Sep.	增加防異音泡棉	PIPI
V03	2023 Sep.	增加內構圖紙	PIPI

**ELECTRICAL CHARACTERISTICS**

Item	Specification
Frequency Range	2.4 GHz / 5.x GHz(note-1)
Impedance	50 Ohm Nominal
VSWR	2.0 (Max)
Radiation	Omni-directional
Gain(peak)	2.4 GHz @ 1.85dBi ; 5.x GHz @ 2.32dBi
Polarization	Linear Vertical
Admitted Power	1W

\*note-1: Electrical characteristics will depend on customer's final application.

**MATERIAL TABLE**

Items	Description
Antenna Cover	ABS (Black)
Antenna Side Cover1	ABS (Gold)
Antenna Side Cover2	ABS (Gold)
Antenna Base	ABS+PC (Black)
Connector	Reverse SMA Plug (Black)
Cable	RG178(Brown)
Rivet	POM(Black)
Up Brass Tube	Brass (Ni)
Down Brass Tube	Brass (Ni)
Heat Shrink Tube	Black
Sponge	Black
Plug	Silicon Rubber (Black)

**ORDERING RULE**

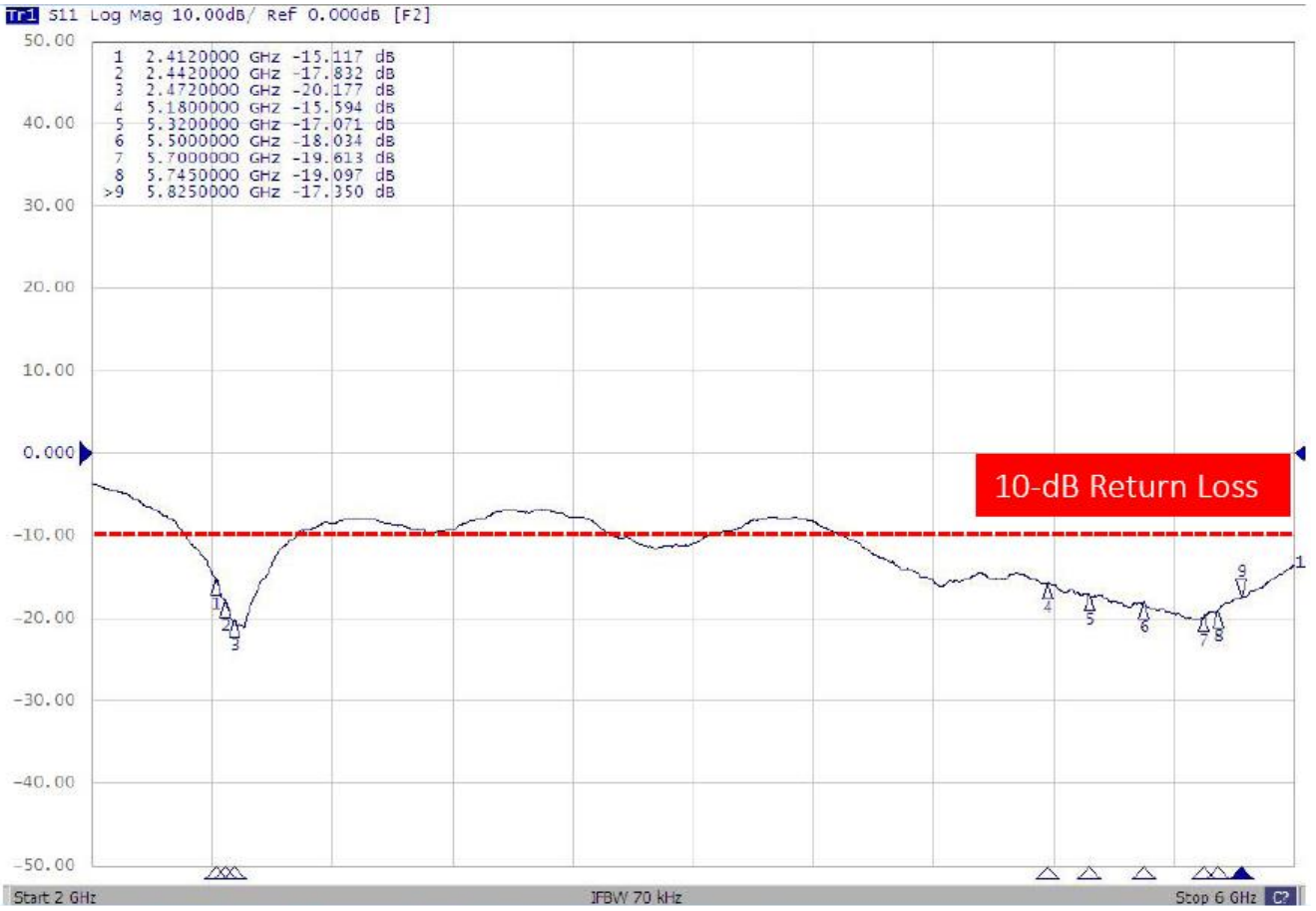
RF	DPA	1713	00	S	B	L	B	8	20
Type Code	Product Code	Dipole Dimension (Unit: mm)	Cable Length (unit: cm)	Connector Brand	Type of Connector	Application	Project status	Wire Diameter	Project
Walsin RF Device	DPA: Dipole Antenna	Per 2 digits of length, width e.g.: 1510 Length 150.8mm, Width 10mm	2 digits for cable length e.g.: 00 None Cable	A: N C:MCX D:IPEX III E: IPEX IV F: IPEX A13 H: Hirose I: IPEX M: MMCX S: SMA T: TNC U:MURATA N: None	A: Reverse Female B: Reverse Male F: Female M: Male N: None	0: 0GHz 3: 3GHz 6: 6GHz A: 2.4GHz ISM band B: GSM 900/1800 dual band G: GPS band L: 2.4/5.2/5.8 GHz tri-band N: NFC T: LTE band W: WCDMA band	B: MP T:Durin g Test X: Pile Run	0:None 1:∅0.81 3:∅1.13 6:RG316 7:∅1.37 8:RG178	01~99 series number

**Peak Gain Table**

2412~2472MHz Gain	1.85 dBi
5180~5320MHz Gain	2.24 dBi
5500~5700MHz Gain	2.32 dBi
5745~5825MHz Gain	1.86 dBi

# ELECTRICAL CHARACTERISTICS

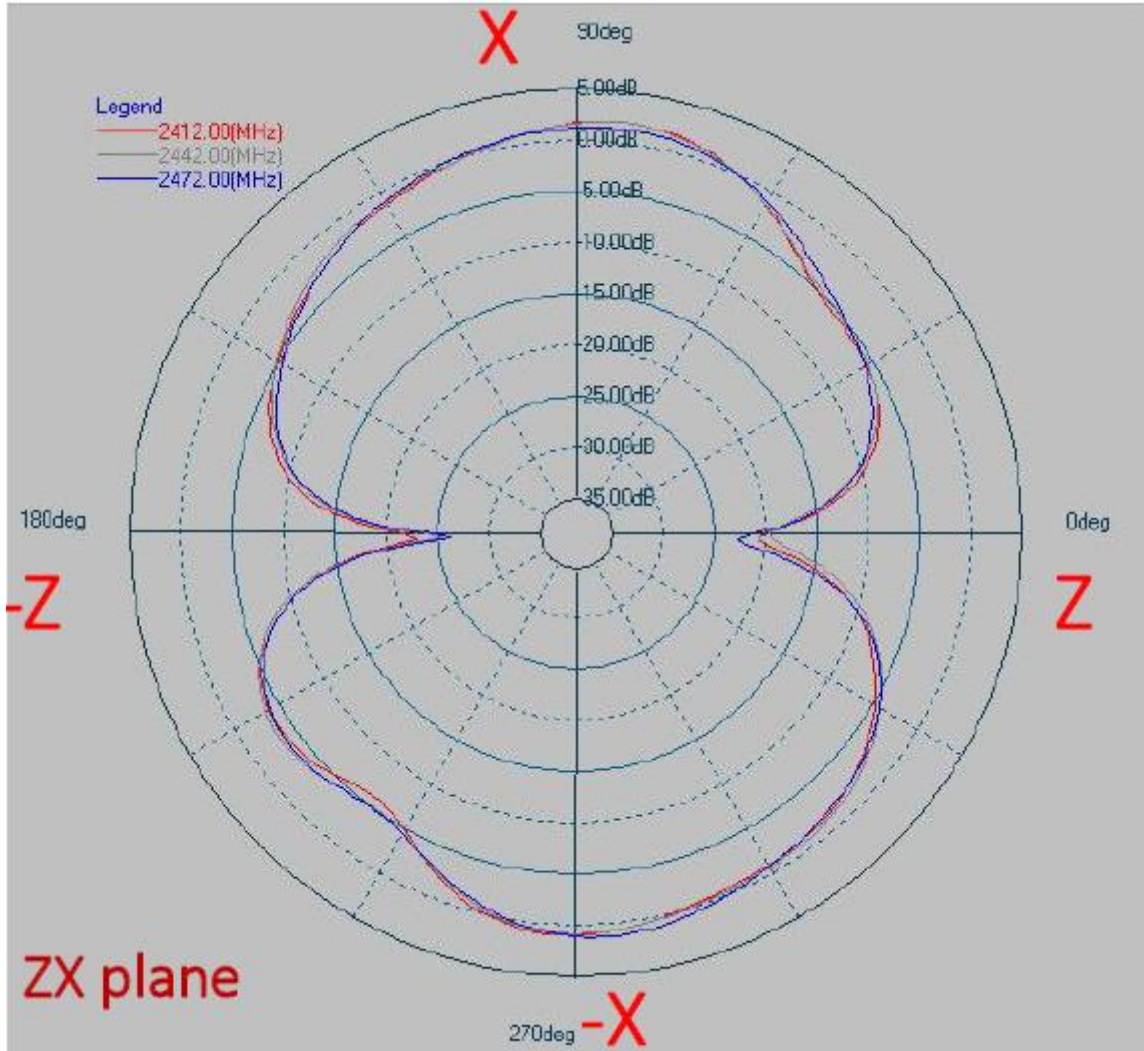
## Return Loss



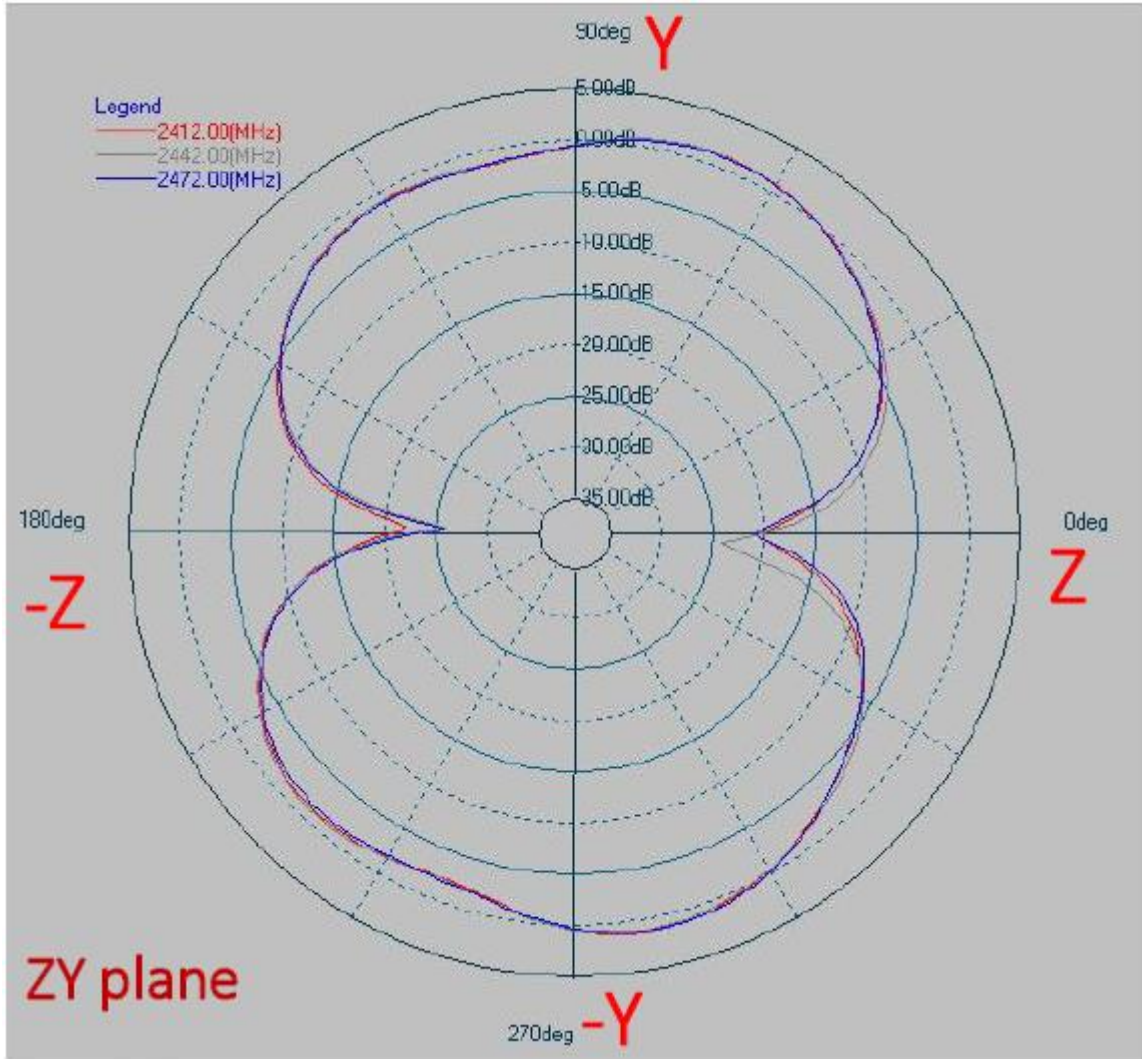
# RADIATION PATTERN

2400~2500 MHz

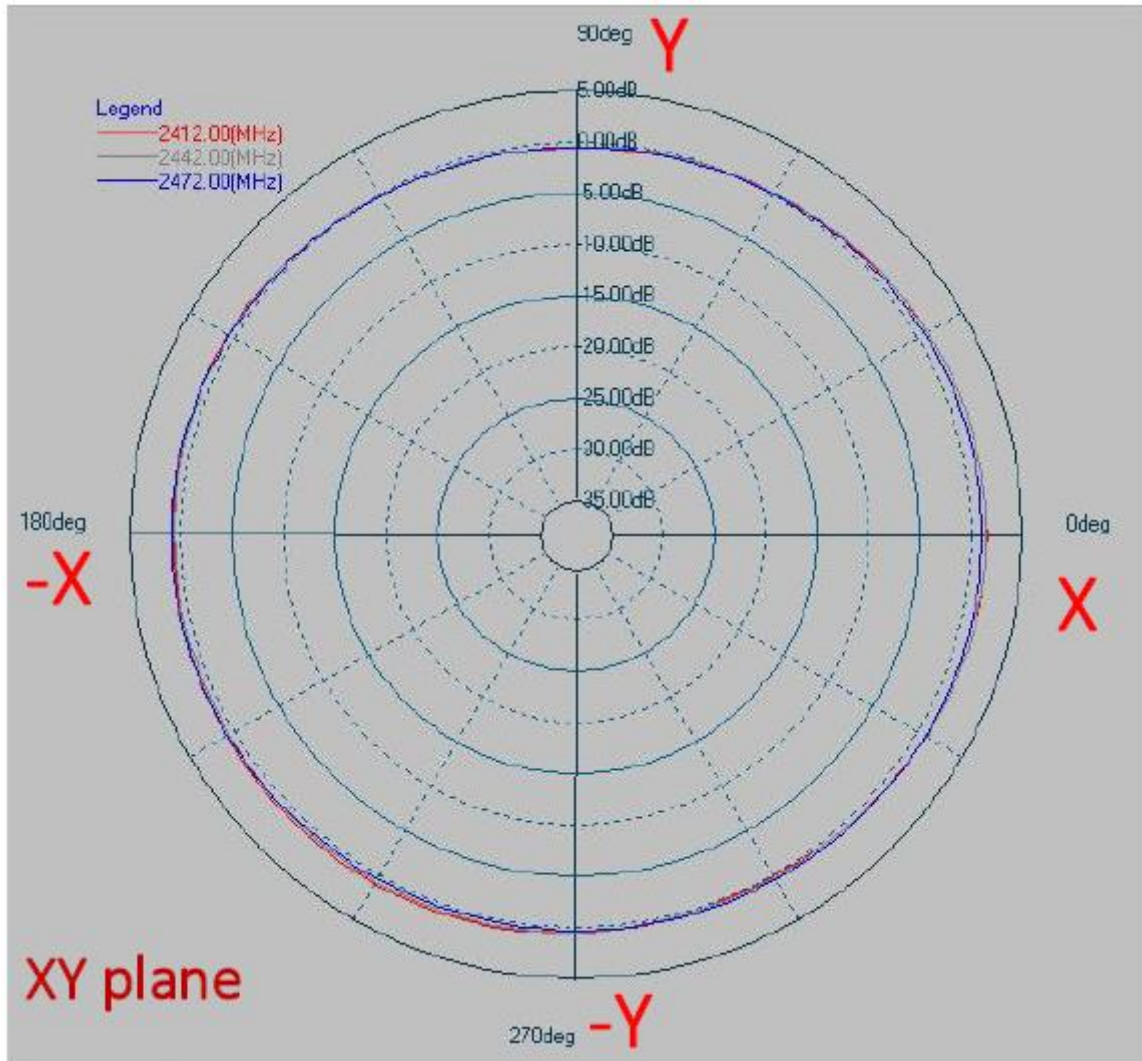
Phi=0.00deg  
Gain . dB



Phi=90.00deg  
Gain . Db



Theta=90.00deg  
Gain . dB

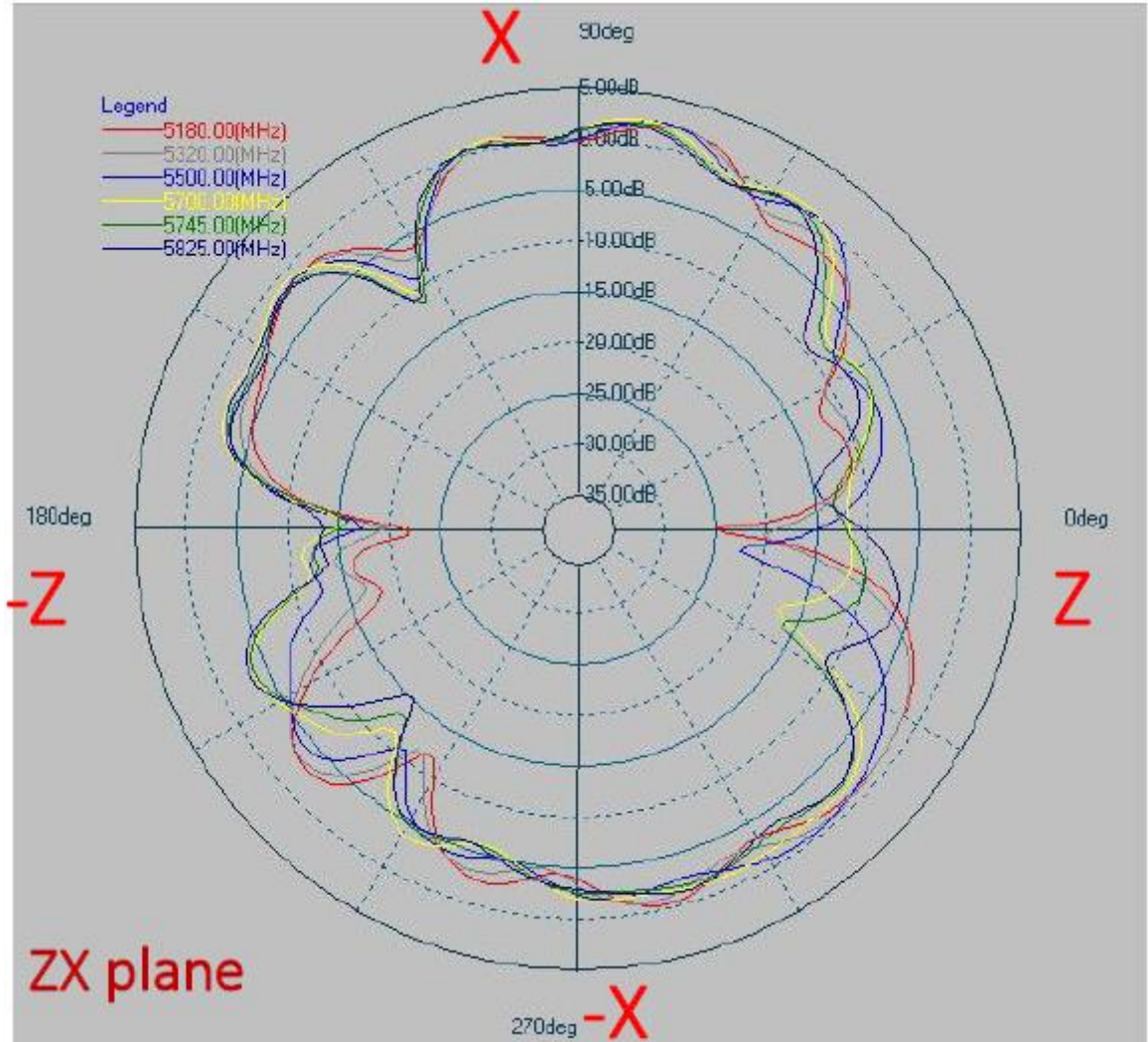


Frequency [MHz]	ZX plane		ZY plane		XY plane	
	Max Value [dB]	Average [dB]	Max Value [dB]	Average [dB]	Max Value [dB]	Average [dB]
2412	1.85	-2.66	1.15	-2.43	1.57	0.57
2442	1.80	-2.56	1.08	-2.39	1.53	0.52
2472	1.20	-2.65	1.03	-2.51	1.10	0.42

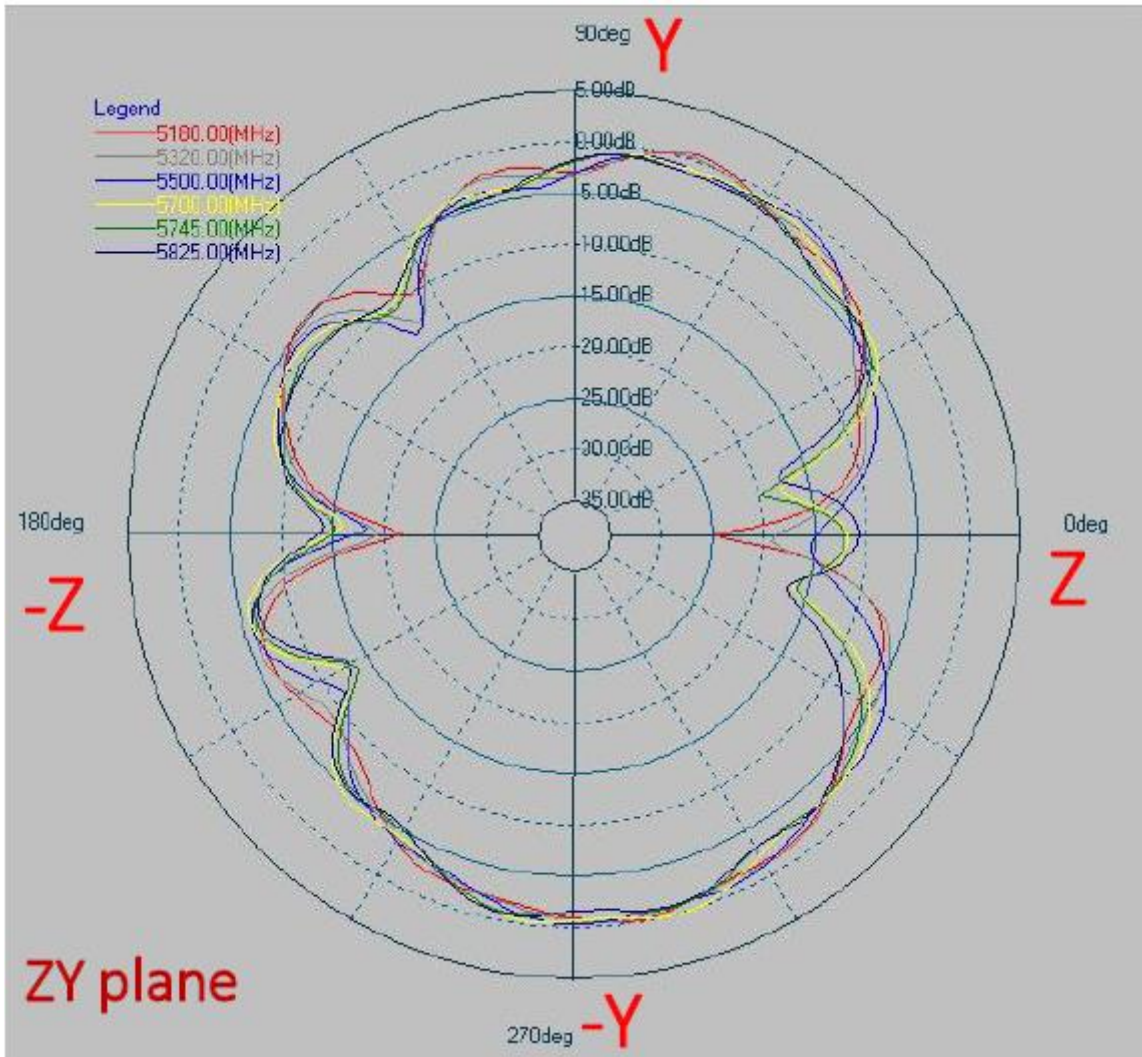


5150~5850 MHz

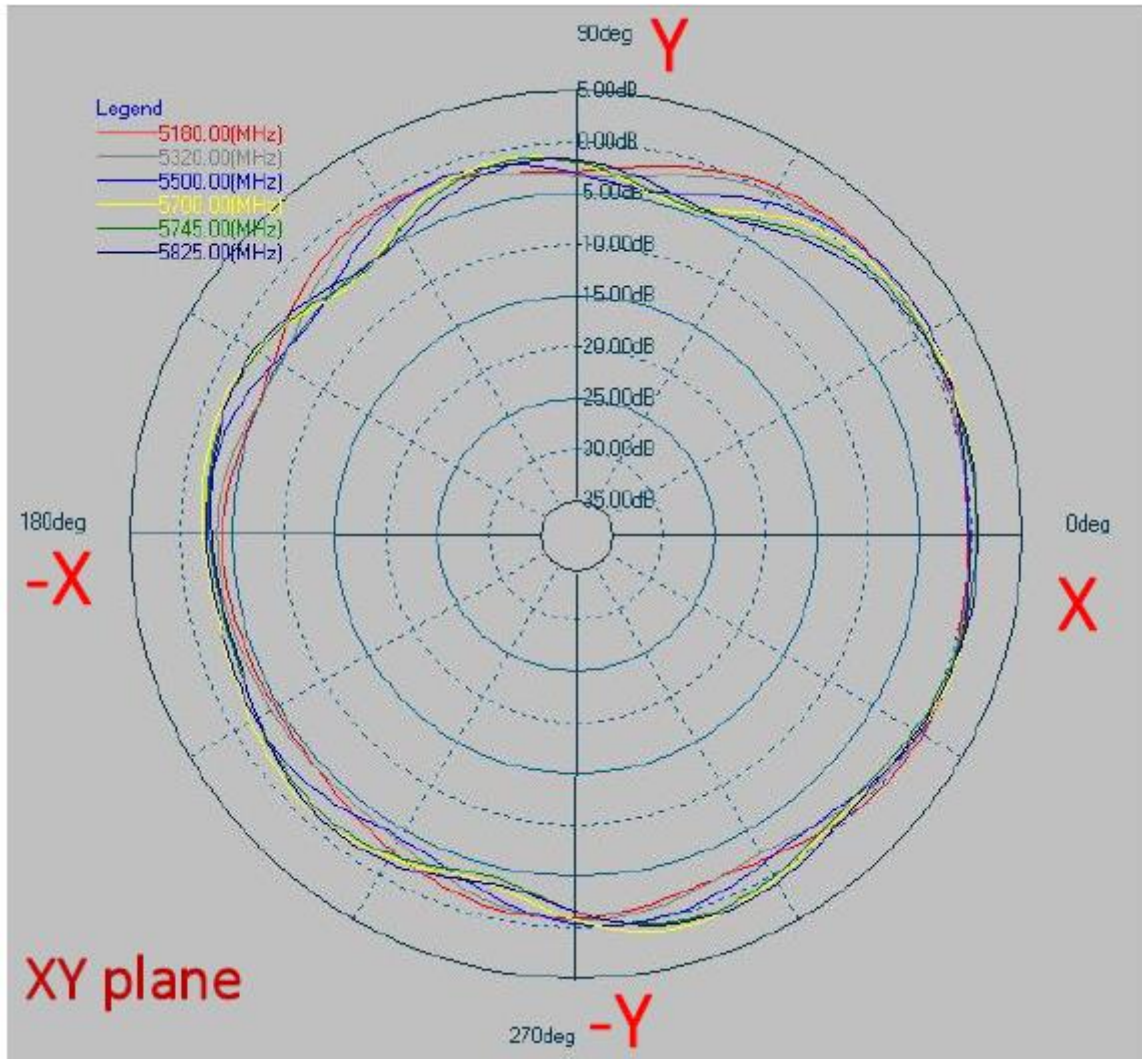
Phi=0.00deg  
Gain . dB



Phi=90.00deg  
Gain . dB



Theta=90.00deg  
Gain . dB



Frequency [MHz]	ZX plane		ZY plane		XY plane	
	Max Value [dB]	Average [dB]	Max Value [dB]	Average [dB]	Max Value [dB]	Average [dB]
5180	2.12	-3.26	0.48	-4.15	1.16	-1.37
5320	2.24	-3.16	0.10	-4.17	1.06	-1.57
5500	2.32	-3.11	-0.46	-4.17	1.42	-1.38
5700	2.29	-3.11	-0.06	-4.14	1.28	-1.01
5745	1.86	-3.67	-0.82	-4.75	0.77	-1.44
5825	1.74	-3.69	-0.86	-4.79	1.08	-1.30